

CLAIM:

1. A method for the percutaneous insertion of a graft supported by at least one attachment system within the vascular system of a patient, the graft capable of assuming a compressed condition and an uncompressed condition, and the at least one attachment system being compressible radially between a
5 compressed and an expanded condition, the method comprising:

percutaneously inserting the graft into the vascular system;
positioning the graft adjacent a diseased portion of the vascular system;
subsequently inserting at least one attachment system into the graft; and
10 implanting the attachment system in the graft to form a seal between the graft and the vascular wall.

2. The method of claim 1, wherein the feeding step includes:
feeding the graft into the vascular system by direct percutaneous insertion;
and
15 thereafter, feeding the at least one attachment system into the vascular system by direct percutaneous insertion.

3. The method of claim 2, wherein the graft feeding step includes:
inserting the graft in compressed condition by direct percutaneous insertion into a point of access to the vascular system over a prepositioned guidewire;
20 applying a traction force to opposing ends of the graft to control the position of the graft within the vasculature; and
activating the graft from its compressed condition to its uncompressed condition.

4. The method of claim 2, wherein the attachment system feeding step
25 includes:
applying a traction force to opposing ends of the graft to control the position of the graft within the vasculature;

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positioning the at least one attachment system within the bore of the graft;

5. The method of claim 4, wherein the traction force applying step is carried out using a plurality of catheters, each catheter configured to exert a force on the graft from a different point outside the vasculature.

10 6. The method of claim 5, wherein the graft is configured to have a substantially cylindrical profile having an superior end and a inferior end, and wherein a first catheter having a first end and a second end is releasably connected by the first end to the superior end of the graft and configured so that the second end thereof extends through a point of access to the vasculature located in the left
15 axillary artery, and wherein a second catheter having a first end and a second end is releasably connected by the first end to the inferior end of the graft and configured so that the second end thereof extends through a point of access to the vasculature located in an iliac artery.

7. The method of claim 5, wherein the graft is configured to have a bifurcated profile having an superior trunk with an superior end and first and second inferior legs each with an inferior end, and wherein a first catheter having a first end and a second end is releasably connected by the first end to the superior end of the graft and configured so that the second end thereof extends through a point of access to the vasculature in the left axillary artery, a second catheter having a first end and a second end is releasably connected by the first end to the inferior end of the first leg and configured so that the second end thereof extends through a point of access to the vasculature in a first iliac artery, and a third

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a first catheter having a first end and a second end, wherein the first catheter is releasably connected by the first end to the graft's superior end and is

a second catheter having a first end and a second end, wherein the second catheter is releasably connected by the first end to the first leg's inferior end and is configured for the second end thereof to extend through a point of access to the vasculature in a first iliac artery; and

a third catheter having a first and second end, wherein the third catheter is releasably connected by the first end to the second leg's inferior end and is configured for the second end thereof to extend through a point of access to the vasculature in a second iliac artery.

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